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WELL DEVELOPMENTS

Vol. II Board of Water Well Contractors October, 1987

Monitoring Well Constructor's License Update

The application and surety bond forms for monitoring well constructor's licenses are now available from the Board office in Helena or any of the Department of Natural Resources and Conservation Water Rights Bureau Field Offices.

The cost of the application and examination is $110. Passing score on the examination is 80%. Failure will result in a 90-day waiting period before a reexamination may be taken; a $50 reexamination fee will be charged.

Applications are being reviewed and acted on at regularly scheduled meetings of the Board of Water Well Contractors. The next scheduled meeting will be held on November 13, 1987. If you wish to have your application acted on at that meeting, it must be submitted by November 11, 1987.

Recommended study materials for the examination are: **RCRA Groundwater Monitoring Technical Enforcement Guidance Document** available from the NWWA for $18.75 plus postage. Their address is 6375 Riverside Drive, Dublin, Ohio 43017; and **Occupational Safety and Health Guidance Manual for Hazardous Waste Site Activities** available from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Cost is $5.00. Stock number for ordering is 017-033-00419-6.

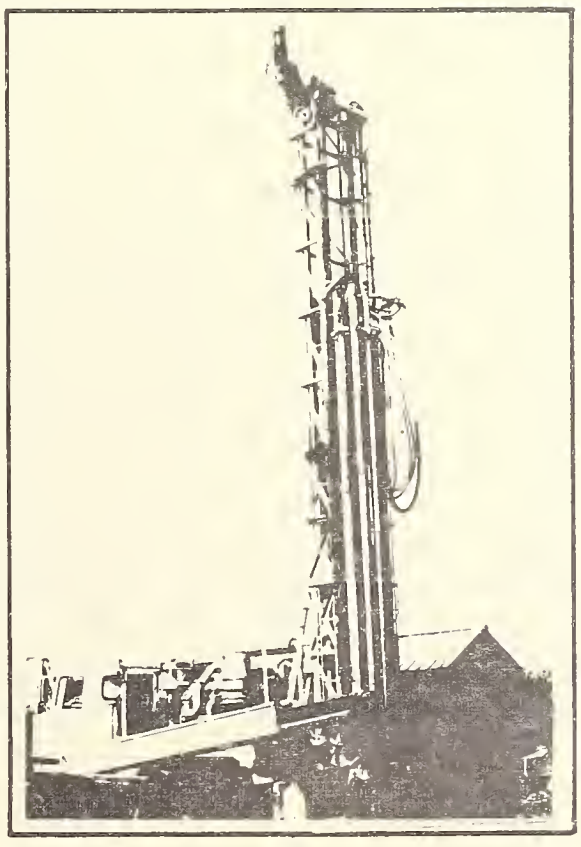
The U.S. Government Printing Office may not have copies on hand because the document is being reprinted; however, the State Library in Helena has copies in both hardback and on microfiche. Check with your local libraries for availability. When requesting copies of the **Occupational Safety and Health Guidance Manual for Hazardous Waste Site Activities** from the State Library, use the following numbers:

GHHS (NIOSA) publication #85-115
SUDOCS Classification #HE20.7108:H33 for a hard copy
SUDOCS Classification #HE20.7108:H3 4/3 for a microfiche copy (you do need to have a microfiche reader)

These two books would be good to have on hand for monitoring wells that must comply with federal guidelines.

Several contractors have asked the Board office who needs to be licensed for construction of monitoring wells. The person supervising the construction of monitoring wells on-site must have a license; this person can be either the contractor or driller constructing the well or the consultant who designed the well and will supervise installation. If there are any questions on the monitoring well constructor's license, please call Diana Cutler at the Board office in Helena. If there are questions she can't answer immediately, she will find the answers and call you.

Another question is "Do the contractors have to file Well Log Reports for monitoring wells with the Department of Natural Resources and Conservation?" The answer is "yes". Department of Natural Resources and Conservation statutes refer to "any well" with regard to filing of Well Log Reports.



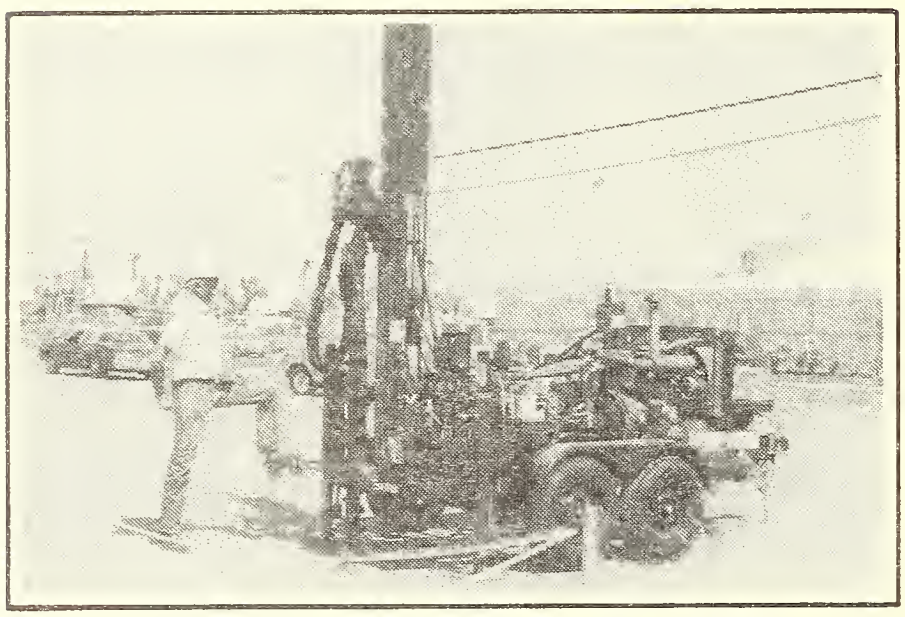
Advisory Task Force Monitoring Well Construction Standards

An advisory task force to assist in drafting monitoring well construction standards is proposed. The first meeting will be mid-November.

If you are interested in serving on this task force please contact Diana Cutler, Program Specialist, Board of Water Well Contractors, 1520 East Sixth Avenue, Helena MT 59620, no later than November 5, 1987.

Monitoring Well Workshop and Outdoor Demonstrations, Las Vegas, Nevada

On May 18 through May 21, 1987, Water Well Contractors Board member Wayne Van Voast and the Board's Program Specialist, Diana Cutler, attended the Monitoring Well Workshop and Outdoor Demonstrations in Las Vegas sponsored by the National Water Well Association. Approximately 150 persons attended the Contractors' workshop. Eight individuals were consultants or regulatory officials. It was interesting to observe the contractors' point of view and to hear first hand of problem areas.



Wayne Van Voast, Auger rig, Las Vegas, Nevada

Contractors dealing with hazardous materials were concerned with the responsibility for disposal of waste material produced during drilling. The question was raised about the responsibility for disposal of drill cuttings produced during drilling at a hazardous site: did it lie with the contractors, the consultants, or the site owner? The response was that the contractor should be sure that his contract with the owner clearly states who is responsible for disposal of cuttings.

Another area of concern was insurance. Contractors from areas around the United States who deal with monitoring wells at hazardous waste sites are finding it difficult to obtain insurance. Most insurance companies are writing insurance with an exclusion for damages caused by pollution related to site work.

Safety was stressed at the workshop. A minimum of 40 hours of EPA-approved safety training is required for any individual who is on a site designated by EPA as hazardous, regardless of the function of that individual, whether as a regulatory official, laborer, monitoring well constructor, or consultant.

Some other areas covered dealt with construction of monitoring wells, including the type of rig to be used, casing materials, and method of sealing. It was apparent that construction methods must relate directly to the purpose of the monitoring well and the materials to be encountered during drilling.

The outdoor demonstrations included actual drilling operations — a petroleum product was encountered at 40 feet on the "demonstration" site, land where a gas station had formerly been located. On Saturday prior to the meetings and demonstrations, the NWWA had arranged to have some of the demonstration wells drilled and then encountered the petroleum product. The EPA was called and limited the depth on the wells to 40 feet, rather than the 100 feet originally planned.

Unusual events continued — or perhaps they should be referred to as usual in the life of a well driller. The drill bit on the auger rig had the outside edges sheared off when drilling was attempted through a caliche layer; another rig, which was using drilling mud, lost its circulation several times; and when one hole was plugged with bentonite, the hole bridged and had to be drilled out before the plugging could continue. All in all, it was a worthwhile and informative conference, and one which greatly benefited the Montana water well contractors who attended.

Twenty-Five-Foot Exemption

There appears to be confusion over the 25-foot exemption under Section 37-43-103(3), MCA. This section exempts from licensure those persons drilling wells that are less than 25 feet in depth.

The exemption has been interpreted to mean that any well less than 25 feet is not considered a water well. Therefore some contractors are assuming that this means they cannot drill a water well less than 25 feet.

Unless there are local restrictions prohibiting drilling a well less than 25 feet, anyone can drill such a well. Even though it is not considered a water well for licensing purposes, it is still a water well for purposes of filing a Well Log Report. The driller is required to file a Well Log Report. (Section 85-2-516, MCA)

Because these wells are exempt from the licensing law, they are also exempt from the minimum construction standards for water wells. Keep in mind, however, that the goal for the well owner is good quality water. The driller should consider whether the shallow well will provide it. Good sealing and grouting procedures must be used to maintain good quality water in the well.

Wells drilled into shallow ground water aquifers are more susceptible to contamination from surface sources. The driller should tell the owner that periodic tests of water quality in the well are recommended.

Flowing Wells

Historically the Department of Natural Resources and Conservation has not taken a very active role in regulating uncontrolled flowing wells or wells wasting water without a beneficial use. Typically, the Department simply sent the alleged violator a letter quoting Section 85-2-505, MCA, and requested them to correct the problem. Usually there was no follow-up to ensure compliance with the law.

Within the past year, the Department has decided to take a more active rule in enforcing Section 85-2-505, MCA.

Section 85-2-505 states in brief that:

> No groundwater may be wasted. The department shall require all wells producing waters which contaminate other waters to be plugged or capped. It shall also require all flowing wells to be so capped or equipped with valves that the flow of water can be stopped when the water is not being put to beneficial use. Likewise, both flowing and nonflowing wells shall be so constructed and maintained as to prevent the waste, contamination, or pollution of groundwater through leaky casings, pipes, fittings, valves, or pumps either above or below the land surface. . .

Contractors should be aware that Board of Water Well Contractors rules also contain sections that apply to flowing wells. They are 36.21.658, which provides for sealing; 36.21.664 subsection (3), which provides for testing; and 36.21.671, which provides for abandonment of flowing wells.

Size, Weight, and Type of Well Casing (Well Log Reports)

Checks on the Well Log Reports show that many contractors do not indicate size, weight, and type of well casing used during the construction of wells. Many Well Log Reports give only the size of the casing. Others indicate size and weight or only weight and no size. Please take a few seconds longer and fill in all three items on your future logs.

Required Review of Plans and Specifications for Public Water System Wells by the Department of Health and Environmental Sciences

Montana Law requires that plans and specifications for construction and modifications to public water systems be reviewed and approved by the Department of Health and Environmental Sciences **prior to construction**. When licensed Water Well Contractors are engaged to drill wells that may be defined as "public" they should see that the owner is properly informed of the review requirements prior to beginning construction. A Public Water Supply System is defined as:

> A system for the provision of water for human consumption from any community wells, water hauler for cisterns, water bottling plant, water dispenser, or other water supply that serves 10 or more families or 25 or more persons daily or has at least 10 service connections at least 60 days out of the calendar year.

There are two types of public water systems, community and noncommunity. A community public water system is one that serves residents (such as towns, subdivisions, trailer courts, etc.) and noncommunity public water systems are those that serve the public but are not community public water systems (such as cafes, campgrounds, bars, etc.).

All plans and specifications for construction or modifications to community systems must be prepared by a registered professional engineer. Plans and specifications for noncommunity systems can be prepared by anyone knowledgeable in the field (plumbers, engineers, water well contractors, sanitarians).

If you have specific questions regarding the laws or regulations, please call the Water Quality Bureau at 444-2406.

Board of Water Well Contractors Members

Ron Guse, Program Manager of the New Appropriation Program, Department of Natural Resources and Conservation, serves as Vice Chairman of the Board of Water Well Contractors. The Water Well Contractors Law requires a member to be appointed by the director of the DNRC. Ron was born and raised in Hamilton, Montana. He attended Western Montana College in Dillon and graduated from the University of Montana with a BA degree in geography. During his college years, he worked summers for the Bitterroot National Forest Service on the Magruder Ranger District, first as a member of the trail construction crew, then fire control aid, and finally as Fire Prevention Guard.

Ron served in the Montana Army National Guard for six years. In 1968, Ron married Mary Philips of Hamilton. They have two children: Caryn, 17, and Daryl, 14.

Ron and his family are active members of the First Presbyterian Church in Helena. He enjoys jogging, fishing, hunting, and camping.

Ron was hired in July of 1968 as a Groundwater Technician by the Montana Water Resources Board. In the fall of 1969, he became a Groundwater Supervisor, with primary duties to supervise the administration of the Groundwater Code of 1961, continue a survey of groundwater resources in the state, and prepare a groundwater and geology section for each new publication of the county groundwater resources survey.

In May of 1970, Ron was appointed Acting Director of the Water Resources Division, becoming responsible for supervising 28 employees and all activities of the Water Resources Division. From July 1970 through June 1972, Ron served as Director of the Water Resources Division. During this time, he traveled extensively and gained firsthand knowledge of other western states' administrations and their problems.

Ron was also appointed as Executive Secretary of the Mined-Land Reclamation Committee by Governor Anderson during this period. The committee was composed of state senators and representatives and was charged with the responsibility of drafting a bill for legislative consideration, which was passed as Montana's first Mined-Land Reclamation Act.

With Executive Reorganization in 1972, the Department of Natural Resources and Conservation was created and Ron became Water Rights Coordinator to the Administrator of the new Water Resources Division. He helped draft what became the Montana Water Use Act of 1973.

Ron has held his position on the Board of Water Well Contractors since November 1978. He served as chairman of the subcommittee to establish minimum construction standards for water wells in Montana.

Ron says he is available at any time to discuss water right or water well problems or will assist in any way he can.

For further information on any of the material contained herein contact:
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